

Attorney Docket No.: J3681(C)  
Serial No.: 10/521,983  
Filed: August 17, 2005  
Confirmation No.: 1483

### **REMARKS**

Claims 1, 13 and 14 have been amended to specify that the carrier fluid comprises a masking oil of viscosity  $10^4$  mm<sup>2</sup>/s or greater. See the specification at page 6, lines 5 to 7. Claim 1 has been further amended to incorporate the requirements of claim 11. New claim 15 specifies that the mean particle size of the milled activated aluminum chlorohydrate is from 20 to 30 microns. See the specification at page 5, lines 7 to 9. Claim 11 has been cancelled without prejudice. Entry of these amendments is respectfully requested.

Claims 1-14 stand rejected under 35 U.S.C. 102(b) as anticipated by both Hall (US 5,840,289) and McGlone et al. (US 6,503,492). These rejections are respectfully traversed.

Pursuant to the subject invention it was found that a suspension of milled activated aluminum chlorohydrate (AACH) in a carrier oil comprising a high viscosity masking oil, in particular, a carrier oil comprising a masking oil having a viscosity of  $10^4$  mm<sup>2</sup>/s or greater, can be used to provide aerosol antiperspirants compositions having both good antiperspirancy and remarkably low whitening. Further, the subject compositions may maintain the antiperspirancy efficacy of a conventional aerosol while using lower levels of antiperspirant active than are commonly employed in commercial aerosol compositions. Without wishing to be bound to theory, it is believed that the high viscosity of the masking oil coupled with the morphology of the milled antiperspirant active results in an active that is particularly well coated with masking oil and rendered less visible to the naked eye.

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Data provided in Table 1 of the subject application contrasts the whitening exhibited by compositions that contain milled or unmilled AACH together with DC200 polydimethyl siloxane having a viscosity of either 50mm<sup>2</sup>/s or 30,000mm<sup>2</sup>/s. The compositions that contained the unmilled AACH and either the 50mm<sup>2</sup>/s or 30,000mm<sup>2</sup>/s silicone both had whiteness scores in excess of 1300, as did the composition that contained the milled AACH and the 50mm<sup>2</sup>/s silicone. In contrast, the composition that contained the milled AACH and the 30,000mm<sup>2</sup>/s silicone had a whiteness score of only 750, which represents a significant reduction in whitening.

The concept of attempting to "match" the refractive index of an antiperspirant active with that of a masking oil is known and is disclosed, for example, in Hall. Hall reports that hollow activated aluminum chlorohydrate, which generally has a core with an RI value significantly lower than that of its outer region, can be made less whitening in an antiperspirant composition by milling or grinding the hollow particles (thereby helping to level out the active's RI to a value of about 1.52-1.57) and combining the milled particles with a masking oil having an RI of 1.40 -1.57. Hall is silent as to the viscosity of the masking oil, and there is nothing in the citation that discloses or suggests that carrier oil viscosity has any effect whatsoever on the whitening exhibited by an aerosol composition containing a milled AACH active.

McGlone et al. is directed to the use of a cannabinoid receptor activating agent to reduce the irritancy of antiperspirant compositions containing an aluminum or aluminum-zirconium active. The antiperspirant compositions disclosed by McGlone include a variety of AP forms including roll-ons, pumps, soft solids, sticks and aerosols, each of which has different formulation requirements. The patent includes a general discussion of the use of non-volatile silicones having a viscosity of about 10mPa.s, such as up to about  $5 \times 10^6$  mPa.s at 25°C, as being among the

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materials that may be employed as emollients in antiperspirant compositions. The only examples of aerosols are found in Table 13 wherein compositions that contain both milled and unmilled AACH are disclosed. The Table 13 examples include one or more non-volatile carrier oils, but there is no disclosure in such examples of the use of a high viscosity oil as required by the subject claims.<sup>1</sup> Like Hall, McGlone et al. does not disclose or suggest that carrier oil viscosity has any effect whatsoever on the whitening exhibited by an aerosol composition containing a milled AACH active.

To summarize, the combination of high viscosity masking oil and milled antiperspirant active provides a surprising and unpredictable improvement in whitening that is not disclosed by Hall or McGlone, either individually or in combination.

In view of the foregoing, reconsideration and allowance of the subject claims is respectfully requested.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,



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<sup>1</sup> Example 11.4 does include a high viscosity silicone in the form of a gum, but not a high viscosity masking oil as required by the subject invention.